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Conference Abstract

EDIT Platform Web Services in the Biodiversity Infrastructure Landscape

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Abstract

The EDIT Platform for Cybertaxonomy is a standards based suite of software components supporting the taxonomic research workflow from field work to publication in journals and dynamic web portals (FUB, BGBM 2011). The underlying Common Data Model (CDM) covers the main biodiversity informatics foci such as names, classifications, descriptions, literature, multimedia, literature as well as specimens and observations and their derived objects. Today, more than 30 instances of the platform are serving data to the international biodiversity research communities.

An often overlooked feature of the platform is its well defined web service layer which provides capable functions for machine access and integration into the growing service-based biodiversity informatics landscape (FUB, BGBM 2010). All platform instances have a pre-installed and open service layer serving three different use cases: The CDM REST API provides a platform independent RESTful (read-only) interface to all resources represented in the CDM. In addition, a set of portal services have been designed to meet the special functional requirements of CDM data portals and their advanced navigation capabilities. While the "raw" REST API has already all functions for searching and browsing the entire information space spanned by the CDM, the integration of CDM services into external infrastructures and workflows requires an additional set of streamlined service endpoints

with a special focus on documentation and version stability. To this end, the platform provides a set of "catalogue services" with optimized functions for (fuzzy) name, taxon, and occurrence data searches (FUB, BGBM 2013, FUB, BGBM 2014).

A good example for the integration of EDIT platform catalogue services into broader workflows is the "Taxonomic Data Refinement Workflow" implemented in the context of the EU 7th Framework Program Project BioVeL (Hardisty et al. 2016). The workflow uses the service layer of an EDIT Platform based instance of the Catalogue of Life (CoL) for resolving taxonomic discrepancies between specimen datasets (Mathew et al. 2014). The same service is also part of the Unified Taxonomic Information Service (UTIS) providing an easy-to-use interface for running simultaneous searches across multiple taxonomic checklists (FUB, BGBM 2016).

Keywords

EDIT Platform, Taxonomy, Web Service

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